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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/228,101	01/11/1999	VOLKMAR SCHROTH		7309

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EXAMINER

HARPER, KEVIN C

ART UNIT PAPER NUMBER

2666

DATE MAILED: 06/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/228,101

Applicant(s)

SCHROTH, VOLKMAR

Examiner

Kevin C. Harper

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 2 and 4-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2 and 4-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Response to Arguments***

Applicant's arguments filed March 22, 2004, have been fully considered but they are not persuasive.

1. Applicant argued that Chen does not disclose signals received by a synchronous clock. However, in Chen, Figure 4, input signals are received by a synchronous clock (col. 6, lines 1-2; col. 4, lines 39-40; col. 6, lines 8-12).
2. Applicant argued that Chen in view of Jean-Claude or Humphrey does not disclose a clock synchronizer that receives plesiochronous signals, where the synchronizer includes buffer memories. However, in combination with Chen, Jean-Claude and Humphrey each discloses buffering incoming data which is later synchronized (Figure 1, items 1-4 and Figure 6, item 101, respectively) which attempts to prevent losing the data waiting for the synchronization process.
3. Applicant argued that Chen does not disclose recovering plesiochronous signals. However, in Chen, Figure 4, the multiplexers (items 502-505) also demultiplex synchronous signals and recover the plesiochronous signals (note: the bidirectional arrows as shown indicate two-way communication as illustrated in Figures 1-2 and 6; col. 8, lines 13-15; col. 6, lines 40-43).
4. Applicant argued that Chen in view of Okamoto does not disclose a transmission multiplexer following a transmission processing means. However, in combination with Chen, Okamoto discloses a transmission multiplexer (Figure 14, item 921) for use in recovering a signal.

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 2 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al. (US 5,940,456) in view of Jean-Claude (US 4,542,500) or Humphrey et al. (US 6,396,853), and Okamoto et al. (US 6,094,442).

5. Regarding claim 2, Chen discloses a circuit arrangement for an SDH transmission system for transmitting plesiochronous signals (Figure 4). The circuit comprises a clock synchronizer (items 502-505; col. 6, lines 2-12) for receiving the plesiochronous signals through several input channels and for adapting the received plesiochronous signals to a common processing clock (item 510). The circuit also comprises a reception multiplexer (note: synchronized signals adapted to a common clock are provided at a multiplexed output of PDH 502-505) and a reception processing means (item 508) connected at the output of the reception multiplexer for transforming a plesiochronous signal in to a synchronous signal for an SDH transmission channel (col. 6, lines 8-10). However, Chen does not disclose that the clock synchronizer has several buffer memories corresponding to each input channel for writing plesiochronous signals with their respective clocks and reading out the signals with a synchronous clock. Humphrey and Jean-Claude each disclose a clock synchronizer having several buffer memories for reading in plesiochronous signals with their respective clocks and reading out the signals with a synchronous clock (Humphrey, Figure 6, item 101; col. 8, lines 9-16; Jean-Claude, Figure 1, items 1-4; col. 3, lines 52-60). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to adapt plesiochronous signals to a common clock using

Art Unit: 2666

buffers in the invention of Chen in order to avoid losing data while adapting the input signals to a different clock. Further, Chen in view of Jean-Claude or Humphrey does not disclose a demultiplexer following the reception processing means. Okamoto discloses an demultiplexer for an SDH signal (Figure 8, item 131). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have a demultiplexer following a reception processing means in the invention of Chen in view of Jean-Claude or Humphrey in order to further multiplex the SDH signal and simplify the routing of the further multiplexed SDH signal (Okamoto, col. 6, lines 41-60; col. 8, lines 55-62).

6. Regarding claim 6, the reception processing means of Chen comprises an inherent synchronizer and mapper for equalizing the bit rates of the plesiochronous signal and mapping the equalized plesiochronous signal to provide the synchronous signal (col. 6, lines 8-12 and lines 55-62; col. 7, lines 24-40; note: a mapped plesiochronous signal is able to be recovered from the synchronous signal).

Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al. (US 5,940,456) in view of Okamoto et al. (US 6,094,442).

7. Regarding claim 4, Chen discloses a circuit arrangement for a transmission part of an SDH transmission system for transmitting plesiochronous signals (Figure 4, item 500; abstract). The arrangement comprises a processing means (item 508 and 510) for transforming transmitted synchronous signal in to a plesiochronous signal and a desynchronizer (items 502-505) for recovery of plesiochronous signal clocks and to issue the plesiochronous signals to several output channels (col. 4, lines 39-44; col. 5, lines 58-65). However, Chen does not disclose a transmission multiplexer with an output coupled to the transmission processing means. Okamoto

Art Unit: 2666

discloses a transmission multiplexer (Figure 14, items 921) for outputting an SDH signal.

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have the transmission processing means of Chen to follow a transmission multiplexer in order to recover a single SDH signal from a larger multiplexed SDH signal (Okamoto, col. 10, lines 37-53).

8. Regarding claim 5, in Chen the transmission processing means (item 508) is connected to a demultiplexer in the desynchronizer (any of items 502-505).

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

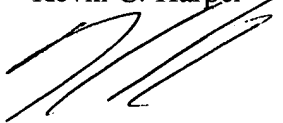
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Harper whose telephone number is 703-305-0139. The examiner can normally be reached weekdays, except Wednesday, from 9:30 AM to 8:00 PM ET.

Art Unit: 2666

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema S. Rao, can be reached at 703-308-5463. The centralized fax number for the Patent Office is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Customer Service Office for TC 2600 at 703-306-0377.

Kevin C. Harper



May 23, 2004



DANG TON  
PRIMARY EXAMINER